Performance Statistics for Different Equity Indices

	Non-Cap-weighted				Cap-weighted	
	Efficient Index	Minimum Volatility	Fundamental Index	S&P 500 Equal-Weighted	S&P 500	Russell 1000
Average return (geometric)	6.4%	2.5%	5.3%	5.7%	0.9%	1.3%
Standard deviation	19.4%	16.6%	20.5%	21.4%	19.8%	20.0%
Semi-deviation (below zero)	13.9%	12.2%	14.5%	15.2%	14.3%	14.4%
Tracking error (w.r.t. S&P 500)	5.8%	6.6%	6.5%	6.5%	0.0%	1.3%
Beta (w.r.t. S&P 500)	0.94	0.80	0.99	1.03	1.00	1.01
Sharpe ratio	0.18	-0.03	0.11	0.13	-0.10	-0.08
Sortino ratio	0.46	0.20	0.36	0.38	0.06	0.09
Information ratio	0.95	0.24	0.67	0.75	NA	0.32
Treynor ratio	0.04	-0.01	0.02	0.03	-0.02	-0.02
95% Value-at-Risk	4.4%	3.9%	4.4%	4.8%	4.5%	4.6%
99% Value-at-Risk	11.0%	10.3%	11.9%	11.3%	10.5%	10.6%
Skewness	-0.62	-0.83	-0.39	-0.46	-0.50	-0.49
Kurtosis	9.44	10.89	10.20	8.43	8.33	9.35

The statistics are based on eleven years of weekly data from 8 January 1999 to 1 January 2010. All Statistics are annualised and performance ratios that involve the average returns are based on the geometric average, which reliably reflects multiple holding period returns for investors. A Cornish-Fisher expansion was used to compute a Value-at-Risk estimate that takes into account the mean, volatility, skewness, and excess kurtosis of index returns.

The EDHEC-Risk Efficient Indices aim to capture equity market returns with an improved risk/reward efficiency compared to cap-weighted indices by maximising the Sharpe ratio (the reward of an investment per unit of risk) of the portfolio of constituents.

Source: EDHEC-Risk Institute Publication, "Improved Beta? A Comparison of Index-Weighting Schemes", September 2010